U. S. Geological Survey:

Evaluate the variability of sediment and nutrient loading into Matagorda Bay

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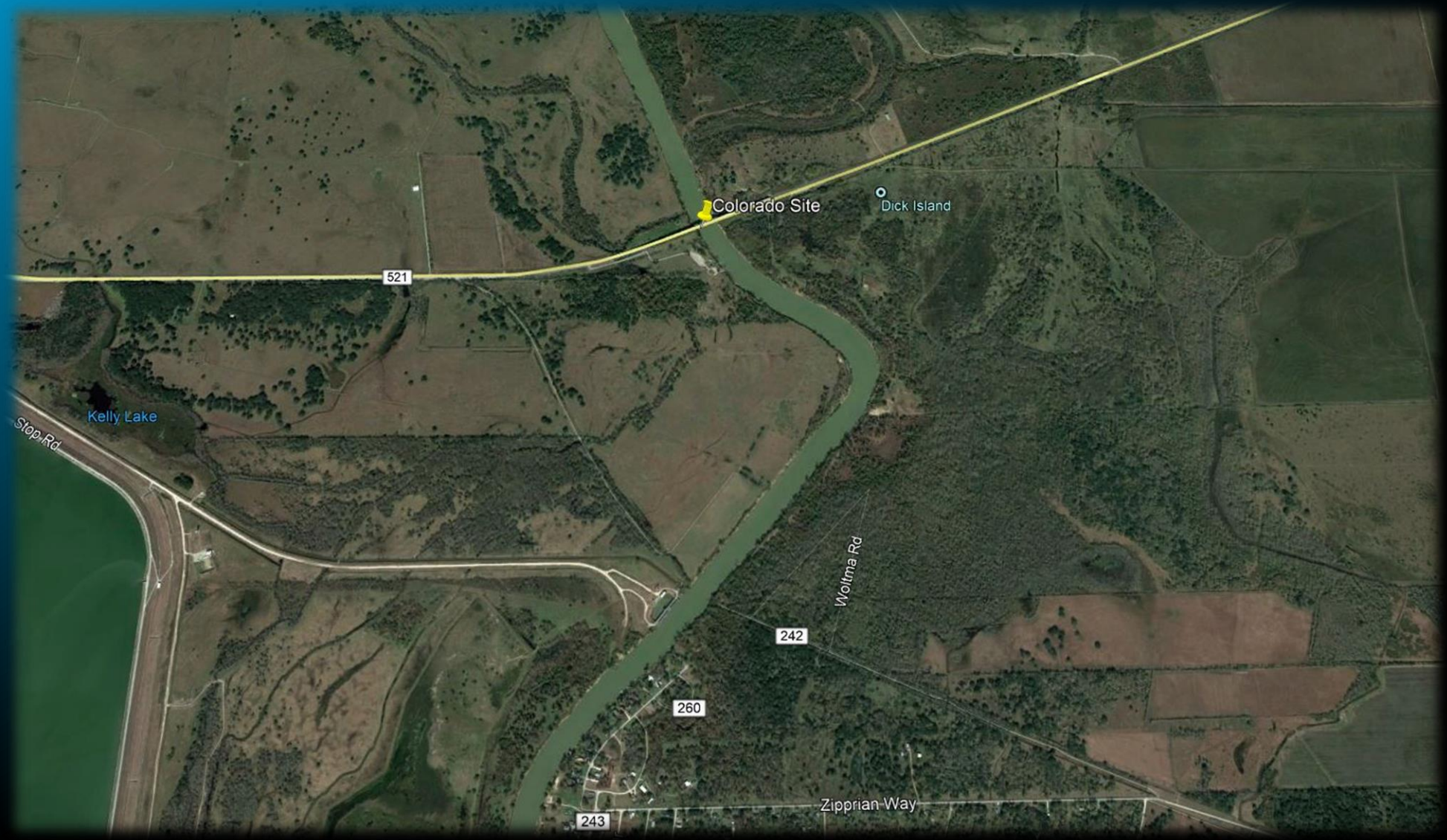
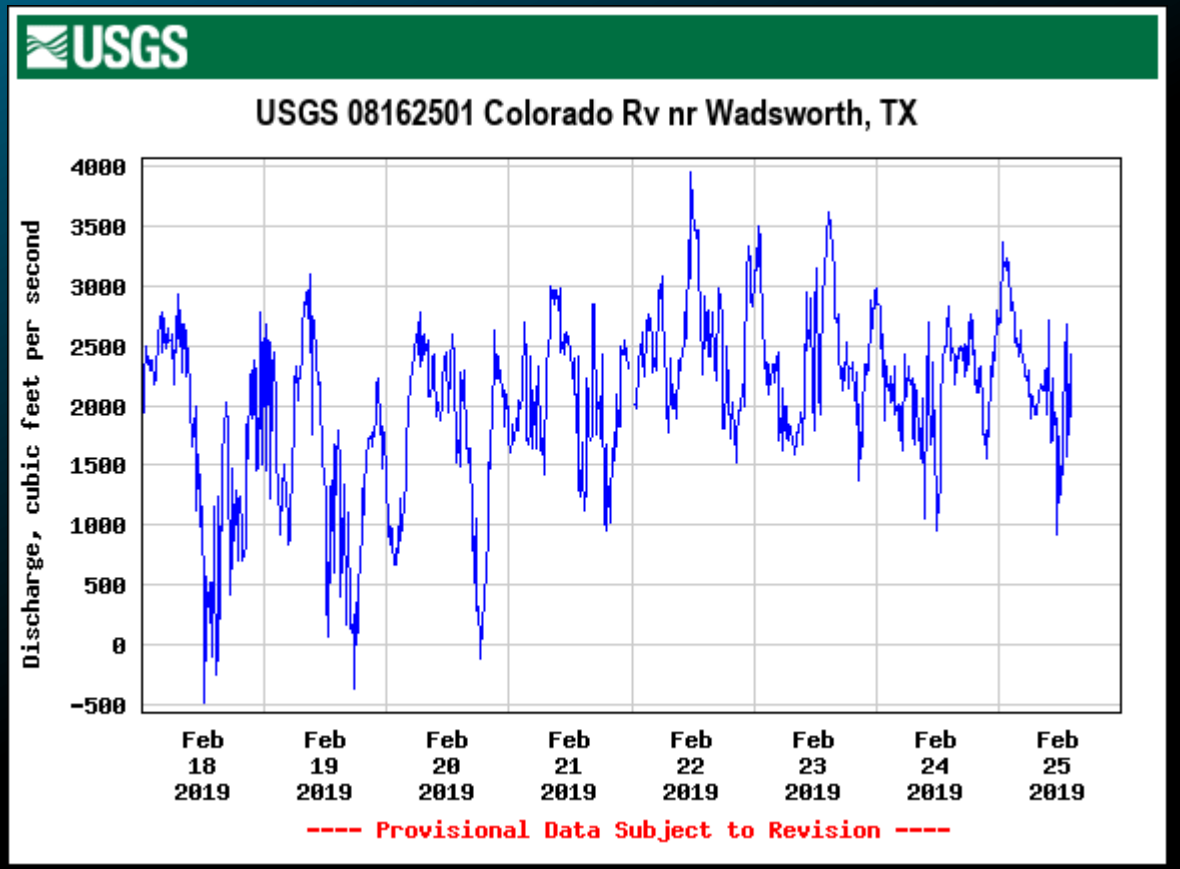
USGS
science for a changing world

USGS 08162501 Colorado Rv nr Wadsworth, TX



Task A:

- Install, operate, and maintain an index-velocity gage at USGS station 08162501, Colorado River near Wadsworth, Texas. This will include the collection of discharge measurements for validation and documentation of possible changes over time. This will include the development of an index velocity rating at the established site. USGS will continue operation and maintenance of the index-velocity gage through this contract period.

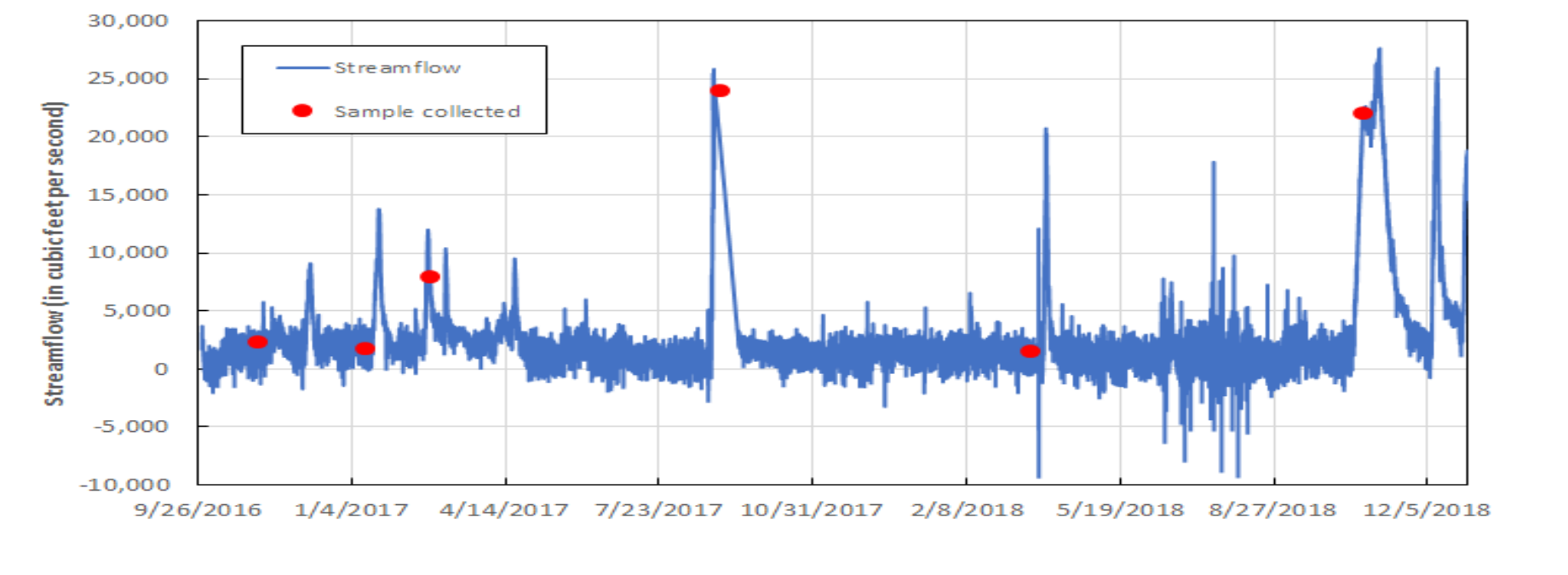


- Over 50 discharge measurements at the location
- 24 measurements (and counting) to develop and maintain the index velocity rating
- http://waterdata.usgs.gov/nwis

Task B:

- Periodically and during high flow events to be determined based on an evaluation of historical measurements of discharge on the Colorado River, measure discharge and collect water quality, nutrient, and sediment samples at the location of the index-velocity gage as funds allow. As well, collect periodic bed material samples at selected river discharges as a preliminary evaluation of bedload sediment contribution to total sediment discharges

Sample Collection



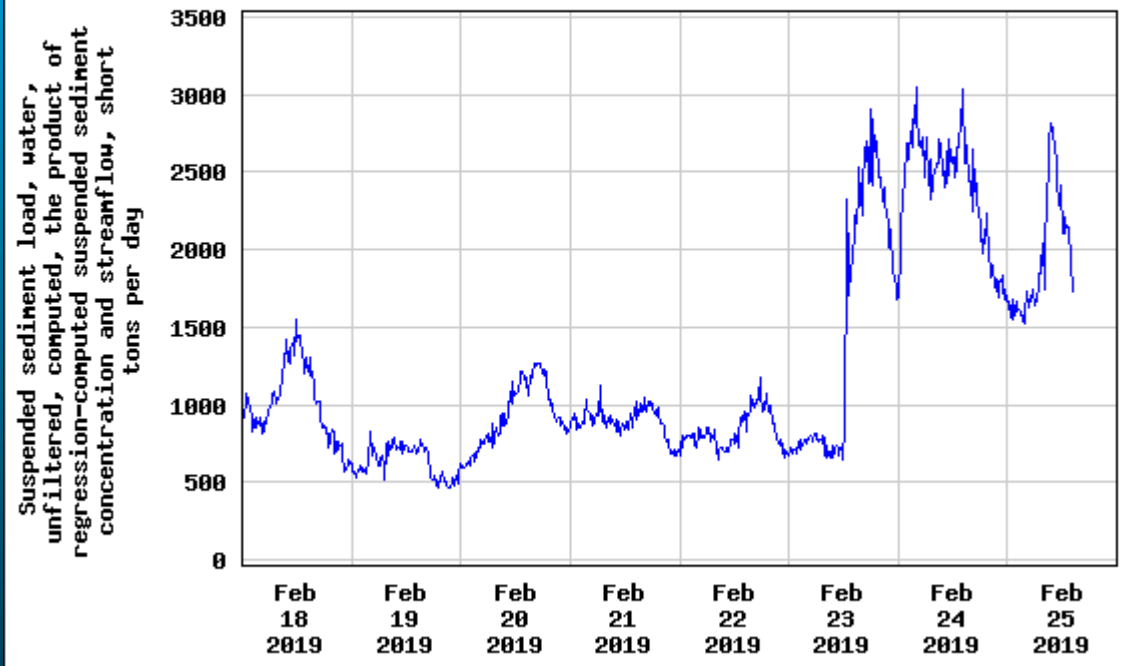
- Over 30 samples collected at the location
- Need to focus future study on more sample collection now that Index Velocity Meter is in place

Task C:

- Continue to develop the relationship between measures of optical turbidity and acoustic backscatter to further support development of the surrogate methodology for monitoring sediment and nutrient loads to estuaries on a continuous basis.

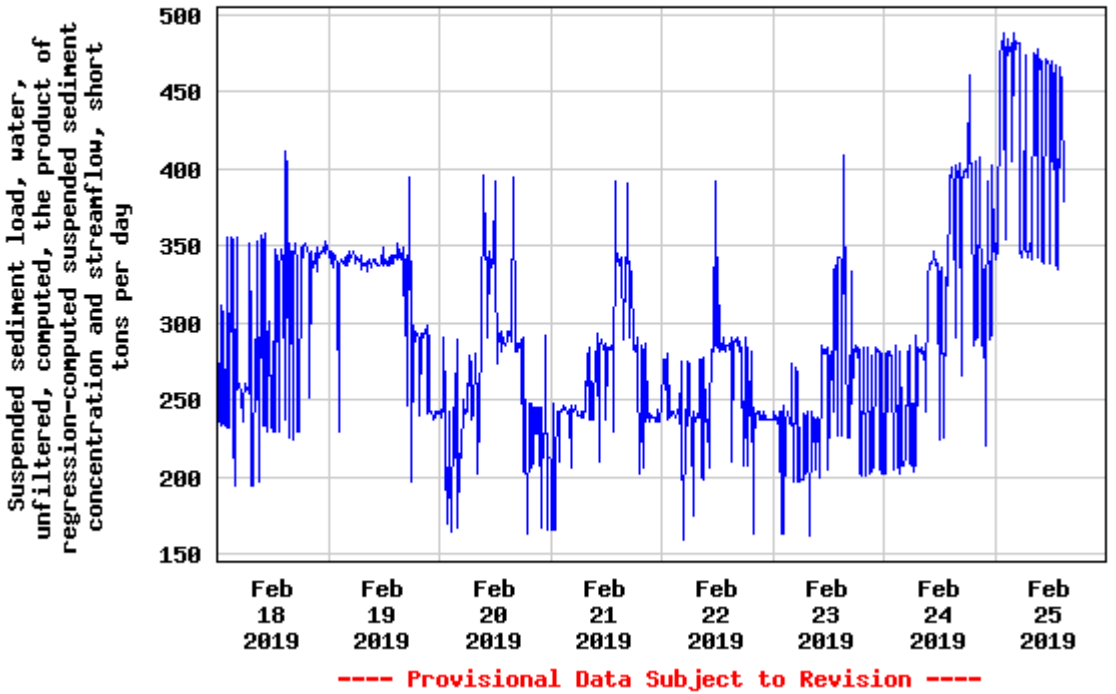
USGS

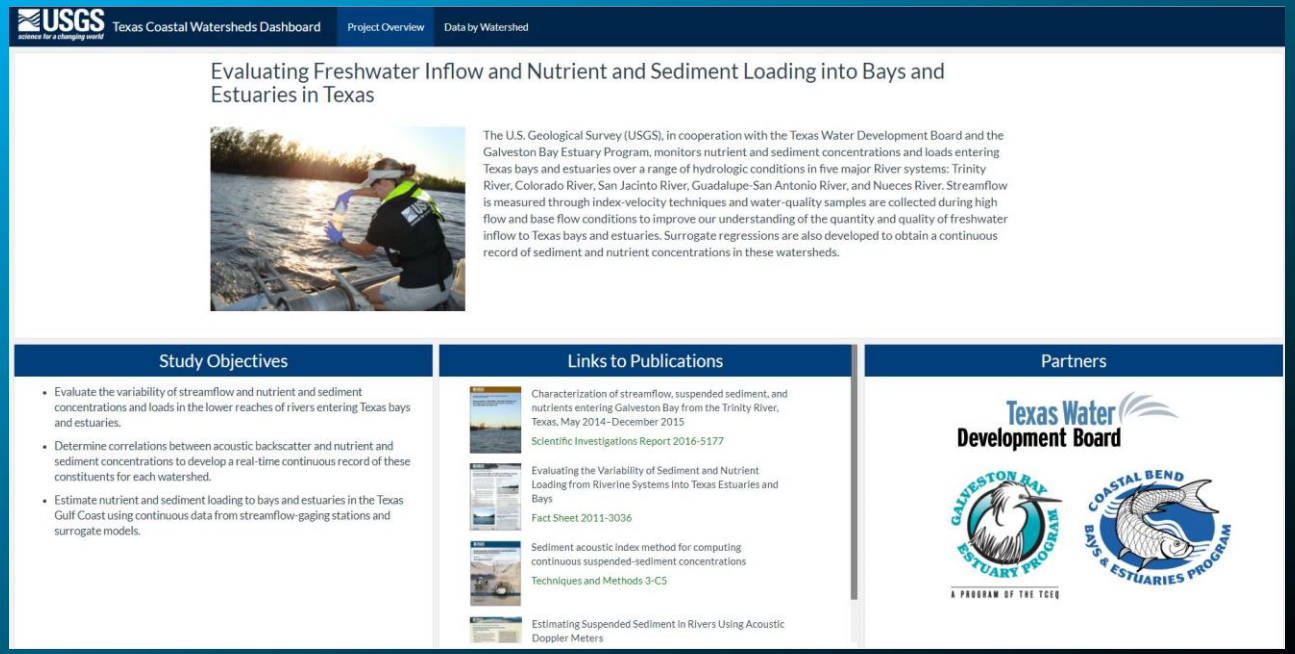
USGS 08067252 Trinity Rv at Wallisville, TX



USGS

USGS 08188810 Guadalupe Rv at SH 35 nr Tivoli, TX





https://zlucena.shinyapps.io/CoastalDashboard/#section-project-overview